

I realize the above is not earthshaking news, but it is submitted with the hope that medical writing will continue to use words that have some meaningful relation to the rest of the language.

RICHARD H. MAILMAN, MD
18406 Roscoe Blvd
Northridge, CA 91325

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EDITOR'S NOTE

Another dictionary (*Webster's Ninth New Collegiate*) defines homophobia and homophobic as "irrational fear of homosexuality or homosexuals." However, Mailman's point is well taken. The headings in the table might have been changed to "Positive, Neutral, Negative."

MSMW

An In Vivo Assessment of the Brain in Alzheimer's Disease

TO THE EDITOR: Alzheimer's disease is a neurodegenerative disorder accompanied by loss of neurons and their connections in selected brain areas. The loss of interneuronal structural integrity represents a fundamental defect that prohibits the normal communication between nerve cells. It is this communication that is the essence of nervous system function.

Current evidence now implicates the acetylcholine neurotransmitter system as one of the principal areas of damage in Alzheimer's disease. A number of features further characterize the several aberrations germane to the neuropathology of Alzheimer's disease. Some of these are a decrease in choline acetyltransferase found in the cortex upon postmortem examination¹ and a reduction in the apparent synthesis of acetylcholine in biopsy tissue²; also, the basal forebrain nucleus of Meynert,² which sends cholinergic circuits to widespread areas of the cerebral cortex, has been shown to display remarkable neuronal losses in the brains of patients with Alzheimer's disease.

Despite these important developments in our understanding of the neuropathology in Alzheimer's disease, we still remain unable to specifically diagnose the disorder clinically. Most current diagnostics fall under the rubric of the medical exclusion criteria with its groundings based upon clinical examination and psychometric testing. Furthermore, under the best of circumstances, which are difficult to achieve, diagnostic accuracy does not exceed 90%.

Recently a group in Boston and Washington, DC,³ has reported the first utilization of in vivo imaging of receptor binding and cerebral perfusion in a patient with Alzheimer's disease. Using a technique called single photon emission computed tomography (SPECT) and iodine 123-labeled 3-quinuclidinyl-4-iodobenzilate (123-QNB) and perfusion imaging by employing ¹²³I-N-isopropyl p-iodoamphetamine, these groups have demonstrated that a patient with Alzheimer's disease exhibited a sharp decrease in perfusion to the posterior temporal and parietal cortex and a moderate diffuse impairment of muscarinic receptor binding, which cannot be attributed to perfusion changes.⁴ Until now, receptor function

could be evaluated only at biopsy or autopsy. The development of radiotracer techniques such as specifically labeled agonists and antagonists of particular neurotransmitters in concert with emission tomography can potentially provide clinicians with an invaluable tool to explore for the in vivo assessment of receptor binding and cerebral perfusion in clinical investigations.

ELLIOT M. FROHMAN
2nd Year Medical Student
University of California, Irvine
California College of Medicine
Student Representative
CMA Advisory Panel on Neurology
STANLEY van den NOORT, MD
Professor, Department of Neurology
University of California, Irvine
California College of Medicine
Irvine, CA 92717

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3. Holman BL, Gibson RE, Hill TC, et al: Muscarinic acetylcholine receptors in Alzheimer's disease. *JAMA* 1985; 254:3063-3066
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Tuberculous Peritonitis and Liver Cirrhosis

TO THE EDITOR: I have read with interest the article "Tuberculous Peritonitis Developing in a Case of Documented Peritoneal Carcinomatosis,"¹ which emphasizes the importance of correctly diagnosing tuberculous infections in the presence of concomitant diseases with similar clinical and laboratory features.

Tuberculous peritonitis now has a lower incidence in the more developed countries and often escapes diagnosis.² When associated with liver cirrhosis, the diagnostic problems are further increased.³ I here report two cases associated with liver cirrhosis diagnosed by means of peritoneoscopy, performed under local anesthesia after sedation with diazepam, and peritoneal biopsy.

Reports of Cases

Case 1. The first patient, a 57-year-old woman with cirrhosis, was admitted with ascites resistant to diuretic therapy, intense asthenia and a slight fever. Protein concentration in the ascitic fluid was 1.9 grams per dl; a direct smear was negative for acid-fast bacilli and showed a prevalence of macrophages with some lymphocytes and neutrophil granulocytes. Peritoneoscopy showed medium nodular cirrhosis with numerous signs of endoabdominal portal hypertension. The visceral and parietal peritoneum was congested and covered with small miliary nodules.

Case 2. The second patient, a 44-year-old man with alcoholic cirrhosis, was admitted with ascites resistant to diuretic therapy. A high septic fever and convulsive epileptic crises appeared, and his general condition was serious. Ascitic fluid protein concentration was 3.2 grams per dl and a direct smear showed macrophages, lymphocytes and occasional neutrophil granulocytes; acid-fast bacilli were absent. The peritoneoscopy showed medium nodular hypertrophic cirrhosis